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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,568	03/17/2004	Masaya Hashimoto	325772034800	3453

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EXAMINER

MCLEAN, NEIL R

ART UNIT	PAPER NUMBER
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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/801,568	Applicant(s) HASHIMOTO ET AL.	
	Examiner Neil R. McLean	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7, and 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments, see Amendment After Final filed 8/20/2009, with respect to the rejection(s) of claim(s) 2-7, and 9-14 under Ishikawa in view of Inuzuka have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Ishikawa in view of Abe et al. (US 4,922,349).

Status of Claims

2. Claims 2-7, and 9-14 are pending in this application.

Response to Arguments

3. Regarding Applicant's Argument (Page 2, lines 10-14):

"Independent claim 5 recites "a controller which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data, wherein the data attribute is color or monochrome" (emphasis added). This feature is not taught by the combination of Ishikawa and Inuzuka. The Examiner in fact concedes that Ishikawa does not teach this feature, but instead relies on Inuzuka as allegedly teaching this feature."

Examiner's Response:

Ishikawa discloses all of the limitations of Independent Claim 5, however Ishikawa does not disclose expressly:

a controller which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data, wherein the data attribute is color or monochrome.

Abe discloses a controller (CPU 27) which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data, wherein the data attribute is color or monochrome (Abe discloses a data communication apparatus which divides character code data and image data into different blocks, further divides an image data block in accordance with image characteristics such as a halftone image or a color image, and communicates the data; Column 1, lines 51-56. The CPU 27 stores the image data in the IMEM 25 and at the same time, forms an image area separation table as shown in FIG. 4 in the PMEM 23 on the basis of the address and image attribute data supplied from the reader 10; Column 4, lines 4-8).

Inuzuka & Abe are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of image compression by dividing an image into blocks based on set up values inputted prior to compression. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine the size of a block of data to be compressed depending on whether the data is monochrome or color. The suggestion/motivation for doing so would be to reduce the problem of image deterioration when character code data is transmitted as image data as disclosed by Abe in the Background of Invention. Abe further discloses that if the data is separated into different block areas according to attributes of the data, that data communication is improved. Therefore, it would have been obvious to combine Inuzuka's method of compressing based on the color of an image with Abe's

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method of dividing an image into blocks to obtain the invention as specified in order to enhance the image quality and improve communication efficiency.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al. (US 5,838,833) hereinafter 'Ishikawa'.

Regarding Claim 6: (Previously Presented)

Ishikawa discloses data processing apparatus, comprising:

a compressor (Image Compression Device 1 in Figure 3; Column 8, lines 4-10); which compresses every block of inputted job data into compressed data (the image data DG stored in image memory 21 are read out in block units by first block allocating circuit 22 and second block allocating circuit 23 described in Column 8, lines 13-19; See Block Allocating Circuit 22 and Second Block Allocating Circuit 23 in Figure 3);

a memory which stores the compressed data (Image Memory 21 in Figure 3; Column 8, lines 11-12); and

a controller (Area discriminating circuit 24 discriminates the range blocks BR stored in range block memory 232 as shown in Figure 3 and described in Column 8, lines 45-49) which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data

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(e.g., Area discrimination is accomplished by determining whether or not an edge area (containing an edge) of the image is included in range block BR as described in Column 12, lines 9-11),

wherein the attribute of the data is binary data or multi-valued data (Column 7, lines 39-47).

Regarding Claim 13: (Previously Presented)

The Ishikawa reference, explained in the rejection of apparatus claim 6, renders obvious the method of claim 13, because these steps occur in the operation of the apparatus as discussed above. Thus, the argument similar to that presented above for claim 6 is equally applicable to claim 13.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-5 and 9-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa, in view of Abe et al. (US 4,922,349) hereinafter 'Abe'.

Regarding Claim 5: (Previously Presented)

Ishikawa discloses the data processing apparatus (Figure 1), comprising:

a compressor (Image Compression Device 1 in Figure 3; Column 8, lines 4-10) which compresses every block of inputted job data into compressed data (The image data DG stored in image memory 21 are read out in block units by first block allocating circuit 22 and second block allocating circuit 23 as shown in FIG. 8 and described in Column 8, lines 13-19; See Block Allocating Circuit 22 and Second Block Allocating Circuit 23 in Figure 3);

a memory which stores the compressed data (Image Memory 21 in Figure 3; Column 8, lines 11-12);

Ishikawa discloses all of the limitations of Independent Claim 5, however Ishikawa does not disclose expressly:

a controller which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data, wherein the data attribute is color or monochrome.

Abe discloses a controller (CPU 27) which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data, wherein the data attribute is color or monochrome (Abe discloses a data communication apparatus which divides character code data and image data into different blocks, further divides an image data block in accordance with image characteristics such as a halftone image or a color image, and communicates the data; Column 1, lines 51-56. The CPU 27 stores the image data in the IMEM 25 and at the same time, forms an image area separation table as shown in FIG. 4 in the PMEM 23 on the basis of the address and image attribute data supplied from the reader 10; Column 4, lines 4-8).

Inuzuka & Abe are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of image compression by

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dividing an image into blocks based on set up values inputted prior to compression. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine the size of a block of data to be compressed depending on whether the data is monochrome or color. The suggestion/motivation for doing so would be to reduce the problem of image deterioration when character code data is transmitted as image data as disclosed by Abe in the Background of Invention. Abe further discloses that if the data is separated into different block areas according to attributes of the data, that data communication is improved. Therefore, it would have been obvious to combine Inuzuka's method of compressing based on the color of an image with Abe's method of dividing an image into blocks to obtain the invention as specified in order to enhance the image quality and improve communication efficiency.

Regarding Claim 2: (Previously Presented)

Ishikawa further discloses the data processing apparatus as recited in claim 5, further comprising an attribute discriminator for discriminating the attribute of the data (Area Discriminating Circuit 24; e.g., Column 8, lines 45-49).

Regarding Claim 3: (Previously Presented)

Ishikawa further discloses the data processing apparatus as recited in claim 5, wherein said controller sets the size of the block depending on the attribute of the data into a size of a page unit or a size of a divisional unit which is a size obtained by dividing

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the size of the page unit by plural numbers (e.g., Column 12, lines 9-11).

Regarding Claim 4: (Previously Presented)

Ishikawa further discloses the data processing apparatus as recited in claim 5, wherein said memory stores the compressed data and a management table, and wherein said controller sets the size of the block based on a total capacity of the compressed data and a management table and a capacity of the memory (Column 7, lines 8-11).

Regarding Claims 9-12: (Previously Presented)

The proposed combination of Ishikawa and Abe, explained in the rejection of apparatus claims 2-5, renders obvious the steps of the method of claims 9-12 because these steps occur in the operation of the proposed combination as discussed above. Thus, the arguments similar to that presented above for claims 2-5 are equally applicable to claims 9-12.

8. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa in view of Barnsley et al. (5,065,447) hereinafter 'Barnsley'.

Regarding Claim 7: (Previously Presented)

Ishikawa discloses data processing apparatus, comprising:

a compressor (Image Compression Device 1 in Figure 3; Column 8, lines 4-10); which compresses every block of inputted job data into compressed data (the image data DG stored in image memory 21 are read out in block units by first block allocating circuit 22 and second block allocating circuit 23 described in Column 8, lines 13-19; See Block Allocating Circuit 22 and Second Block Allocating Circuit 23 in Figure 3);

a memory which stores the compressed data (Image Memory 21 in Figure 3; Column 8, lines 11-12); and

a controller (Area discriminating circuit 24 discriminates the range blocks BR stored in range block memory 232 as shown in Figure 3 and described in Column 8, lines 45-49) which sets a size of the block of the data to be compressed by said compressor depending on an attribute of the data (e.g., Area discrimination is accomplished by determining whether or not an edge area (containing an edge) of the image is included in range block BR as described in Column 12, lines 9-11),

However, Ishikawa does not disclose expressly wherein the attribute of the data is a FAX/copy job or another job other than the FAX/copy job.

Barnsley discloses wherein the attribute of the data is a FAX/copy job or another job other than the FAX/copy job (Column 2, lines 51-58).

Ishikawa & Barnsley are combinable because they are from the same field of endeavor of processing digital data, e.g., both references disclose methods of image compression. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the fax of Barnsley in the image compression method of Ishikawa. The suggestion/motivation for doing so would be to increase processing speed, take less storage, and reduce transmission cost (Barnsley; Column 1, lines 50-

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67). Therefore, it would have been obvious to combine the fax of Barnsley with the image compression method of Ishikawa and to obtain the invention as specified in claim 7.

Regarding Claim 14: (Previously Presented)

The proposed combination of Ishikawa and Barnsley, explained in the rejection of apparatus claim 7, renders obvious the steps of the method of claim 14 because these steps occur in the operation of the proposed combination as discussed above. Thus, the arguments similar to that presented above for claim 7 is equally applicable to claim 14.

Examiner Notes

8. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

Conclusion

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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki et al. (US 7,130,072) discloses a multifunction multifunction system applicable to a copying apparatus or a printer, automatic switching of an image processing method and a compression/expansion method for each compressed packet image.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is (571)270-1679. The examiner can normally be reached on Monday through Friday 7:30AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571.272.7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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